Researching Players to Understand the Game

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ABSTRACT

Since the advent of the study of games, scholars have emphasised the idea of games as subsets of the real world, as make-believe and as representational systems. Games have been understood as delimited from the real world by a physical and conceptual boundary that clearly defines what should be understood as part of the game. Players enter and leave the game at will, voluntarily accepting the rules of the game when entering the game subspace, and there is no doubt that players are fully capable of knowing when they cross this boundary, and when they should interpret a specific action as part of the game or not.

This paper asks how researchers can investigate the player's comprehension of the relationship between a game and the world methodologically by the use of qualitative approaches. The motivation for the paper is a postdoctoral research project facing precisely these issues, and the paper serves as a work in progress for developing a qualitative research method for investigating player's understanding of system features, interface elements and what constitutes the game border in computer games. The paper will present the aims of the postdoctoral research project and shortly describe its hypotheses and theoretical points of departure before going on to discuss and suggest methods for investigating these hypotheses.

INTRODUCTION

Since the very beginning of academic interest in the area, definitions and theories of the ontology of games have emphasised the idea that games should be understood as subsets of the real world (Huizinga 1955, Caillois 1962), as make-believe (Caillois 1962) and representational (Crawford 1982). Likewise, it has been pointed out that games are delimited by a physical or conceptual

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boundary that clearly defines what should be understood as part of the game and not (Huizinga 1955, Juul 2005, Salen & Zimmermann 2004). There is no doubt that players are fully capable of knowing when they cross this boundary, and when they should interpret a specific action as part of the game or not. Players enter and leave the game at will, voluntarily accepting the game's rules when entering the game subspace.

However, these are all theoretical assumptions, and little empirical research has been done to investigate players' experiences of these framings. This paper asks how researchers can investigate the player's comprehension of the relationship between a game and the rest of the world methodologically by the use of qualitative approaches. The motivation for the paper is a postdoctoral research project facing precisely these issues, and the paper serves as a work in progress for developing a qualitative research method for investigating player's understanding of system features, interface elements and what constitutes the game border in computer games. The paper will first of all present the aims of the postdoctoral research project and shortly describe its hypotheses and theoretical points of departure before going on to discuss and suggest methods for investigating these hypotheses.

HYPOTHESES AND BACKGROUND

Culturally and historically speaking, games are frames of communication in which any action or utterance has a different status than in the rest of the world (Huizinga 1955, 13; Piaget in Salen & Zimmermann 2004, 472). Modern digital games maintain this basic idea of what a game is, but materialized through computer game systems, they take the communicative frame of reference a step further. All games are information systems where players must utilize available information to be able to behave in a strategically optimal manner, and modern computer games have the benefit of exploiting the techniques of traditional media while also utilizing the usability of computer systems (Jørgensen 2007a, 45-50). At the same time, modern computer games are set in virtual environments depicting fictional worlds (Juul 2005, 121). The reality space of a fictional world is often called the *diegesis* in classical film theory and narratology (Bordwell & Thompson 1997, 92). Everything understood to be part of the fictional reality and that the fictional characters may experience is therefore called *diegetic*. Features that do not exist in the fictional world, but are added to a fictional work for the purpose of providing mood or information to the media user are called *extradiegetic*. Utilizing the border between the user interface and what is viewed as part of the game world for informative and usability purposes, computer games challenge both the traditional notion of the border of games, and the traditional understanding of diegetic and extradiegetic frames of reference in fictional representations. This new frame of communication that plays with the notion of fictionality by connecting aesthetic and operative contexts of games is the central object of investigation in this research project. We can call this new frame of reference *transdiegetic communication* (Jørgensen

2007a, 74, 80-84; 2007b), since it operates by transcending the border of diegetic space, thereby questioning where the fictional game world ends and the usability features of the computer starts. The aim of the postdoctoral research project is to investigate transdiegetic frames of reference in computer games, with emphasis on the operative and aesthetic roles of this kind of communication. Transdiegetic communication questions the common notion of the diegetic and extradiegetic frames of reference by opening for communication across the border between the two. There are several different kinds of example of transdiegetic communication. A typical example is found in many computer game tutorials, for instance in *The Legend of Zelda: Twilight Princess* (2007) when Link's helper Midna tells him that "I'll guide you to the sure footing, so target me with Z and follow me with A!" In this situation, a game character (Midna) talks about the physical interface of the game, a feature that is clearly not part of the fictional world of the game and that a fictional character can know very little about. Also, Midna's reference to "you" emphasises the ambiguous reality status of the message since it refers both to Link and the player at the same time. Another example is the typical adaptive "enemy music" heard in many games when an enemy is approaching. In *The Elder Scrolls IV: Oblivion* (2006), the subtle background music suddenly changes into a more aggressive, up-beat melody when an enemy is on the way to attack the player's avatar. Even though the music is not played by any source in the fictional game world, it allows the avatar to dismount the horse and draw the blade before he has even spotted the enemy. The fact that the game character is allowed to take action based on extradiegetic information questions the status of the music as extradiegetic and instead transforms the music into usability information relevant for diegetic action (Jørgensen 2007a, 143-144).

Central to the understanding of transdiegetic communication is that it has consequences for the player's interaction with the game since it makes the game system and the interface work together with the diegetic game world in providing essential information about game mechanics to the player. Transdiegetic communication therefore has a central role in making the player learn the game system and how it is embedded in the game world, and this frame of reference allows us to understand how computer games work as a usability system at the same time as an independent form of art.

THEORETICAL BACKGROUND

Theoretical approaches from many areas are relevant for this research, such as theories on game spatiality (the magic circle), fiction and fictionality (diegetic and extradiegetic space, possible worlds), and human-computer interaction (usability, interface design). In this context, however, I will shortly present some specific theoretical assumptions that constitute the basis for understanding transdiegetic communication.

Jesper Juul argues that most modern computer games are real rules operating within fictional worlds. He suggests that a central role of the fictional world is to contextualize the game system and make it more intuitive for the player, and that the rules in turn help the player make meaning out of the fictional world (2005, 196). This understanding is prerequisite for transdiegetic communication. The fact that a player is a computer user able to reach into and take rule-based actions that matter in the fictional world, calls for the use of game features that adapt to the dual origin. This is realized by implementing game features that appear to have a natural connection to the game's fictional world, at the same time as they provide usability oriented information to the player (Jørgensen 2007a). An example is found in the strategy game *Warcraft III: Reign of Chaos* (2002), where the military units respond to player commands with verbal lines like "yes, my liege" and "orders?". Produced by military units in a medieval fantasy setting, these utterances feel natural to the fictional universe, but since they are produced in direct response to player actions, they also have a usability function in the game.

When a game is viewed as a combination of fiction and rules, this has particular consequences for the boundary separating game activities from the real world. With reference to Huzinga, Salen and Zimmermann call this boundary *the magic circle* (Salen & Zimmermann 2004, 95), and describe it as a conceptual or physical frame of reference within which the game takes place. In describing the relationship between the magic circle and transdiegetic communication, we can say that transdiegetic communication plays with the magic circle, and utilizes it for informative purposes. To illustrate, we can use the graphical user interface (GUI) of a computer game as an example. Although visually part of the game software, the GUI can be interpreted as the realization of the magic circle in computer games, since it is the interconnection between player and system that enables and invites the player to act in the game world. The GUI is not conceptualized as part of the reality of the game world, but it is the part of the game that allows the player access to the game world. The GUI is therefore part real world (it is the interface of a piece of software), and part game world (it directly affects action taking place in the game world). For comparative purposes we can say the same about the pieces and board of chess: The objects are physical objects in the real world, but they are also the element that allows play to happen. In computer games, the GUI as a conceptualization of the magic circle is utilized in order to connect the game rules with the fictional world. This can be done by integrating system information into the fictional world. In *World of Warcraft* (2004) available quests are marked by an exclamation mark placed above the head of non-playing characters, thereby being system messages that provide information that eases player navigation in the fictional world. Contrary to the GUI, the exclamation mark is a visual part of the game world, since it is placed in the three-dimensional game space, allowing the player to move his avatar around the symbol. However, it makes little sense to

interpret the exclamation mark as part of the fictional world and as a feature that characters in this world are able to see since it seems very alien to the fictional fantasy setting of the game.

Interestingly, contrary to what one might believe, these methods of utilizing the magic circle for communicative purposes do not seem to break the illusion of a fictional world. Instead, it seems that players accept deviations in terms of representation when they are invited to take actions that matter in the fictional world (Jørgensen 2007a, 120-122, 142-143). In other words, the fact that the player is able to take meaningful actions that are integrated into the game world (Salen & Zimmermann 2004, 34-37) seems to make the player accept a game world that includes elements that are difficult to explain as natural to that world. This is made possible by transdiegetic communication and its ability to combine the virtually alien elements of the interface with the fictional world, since it allows system communication to remain exactly that at the same time as it becomes part of the fictional environment.

Related to the methodological question of how players understand and interpret transdiegetic communication and the magic circle, is the question of why we are able to understand the different frames of reference in the game context. With reference to Gregory Bateson, Anne Mette Thorhauge argues that *metacommunication* explains this (Thorhauge 2003; 2007). Metacommunication is our ability to reflect on the communication as such, and allows us to focus on the specific context of a certain action. The concept may therefore explain why play is understood as a referential activity, even when the actions portrayed are the same as they would be in an authentic situation (Bateson 1972, 180). Thorhauge uses the concept to explain how computer game players understand when features in a computer game should be interpreted as system messages and when they should be interpreted as parts of the fictional world. Thus, when meeting someone with an exclamation mark above their head in *World of Warcraft* (2004), the player's ability of metacommunication allows him to interpret it not as a message from the fictional world, but from the game system.

In order to investigate how players understand and interpret this in context, we need a qualitative method that allows the informants to describe and conceptualize their interpretations of games, the magic circle, and the relationships between game/real world and game system/fiction. In the following, I will suggest a method for doing this, while also discussing the problems and opportunities of this method.

INVESTIGATING PLAYER INTERPRETATIONS

Games are dynamic systems that are realized once players start manipulating and interacting with them. An important and defining aspect of games is therefore that they are activities, and that they are intended for play. In order to understand transdiegetic communication and how specific game features

may have aesthetic and functional value at the same time, it is important to understand the game as both artefact and activity. Doing analyses of games per se as structures and systems has therefore only limited value in research that intends to understand the role of the game activity and how game features affect that activity. The need to study actual players and their comprehension and use of specific relevant features is therefore crucial in investigating the magic circle and the interpretation of transdiegetic communication.

Researching the player's interpretation and experiences with a specific material is a difficult issue. Quantitative methods tend to have specific shortcomings in relation to the study of cognitive processes of meaning-making since meaning comes into being from hermeneutic and contextual processes. Ideas such as the magic circle, transdiegetic communication, and the integration of the interface with the fictional world are abstract conceptualizations that are interpreted in relation to earlier experiences with games, computer interfaces, and films, and cannot be fully understood by measuring brain waves or counting the occurrence of specific elements. Although more promising when studying experiences and interpretations, qualitative methods also have their pitfalls in such projects. Observations are problematic since they can never fully explain the subjective experiences going on in the minds of the informants. Making the informants themselves put their experiences and interpretations into words has other problems. We cannot be sure that the players have a conscious understanding of how their minds interpret a specific phenomenon, and it is likely that they have not reflected much upon their experiences. It may also be difficult for informants to report their experiences precisely. Any method that makes the informants report on their own experiences is therefore always second-hand information based on how they interpret their own experiences. Such research will therefore be a study of the players' *interpretation* of their own experiences, and not a study of their actual experiences. In the study discussed in this paper, we are in a particularly problematic area in this respect, since transdiegetic communication is a highly conceptual and theoretical phenomenon that informants might not have any articulated ideas about. It is also important to keep in mind that having no articulated ideas about transdiegetic communication may mean that the concept is not really important for the players' understanding of the relation between the game and the rest of the world. Iintroducing the concept to the informants is therefore problematic, since it may force the informants to start reflecting on something they never have reflected on, and make them interpret the concept through the ideas of the researcher. There is a potential risk that the informants unintentionally – and not necessarily rightfully – will confirm the research hypotheses because they start looking for game features that can be seen as transdiegetic.

There are different methodological approaches to game research, depending on the precise subject matter. Quantitative studies have been carried out in research on player demographics (Yee 2006) and

on virtual economies (Castronova 2001), but as Yee points out, quantitative research on games is scarce, and has primarily been based on publicly available data (Yee 2006, 8). Different approaches to qualitative studies, however, have been more extensive. Qualitative analyses of game structures (i.e. Juul 2007) and their representational features (i.e. Carr 2003) have been popular among researchers interested in the structural and ontological aspects of games, while those interested in multiplayer phenomena and games as social structures tend to use ethnographic methods (i.e. Hung 2007, Steinkuehler 2005, Taylor 2006). Interviews and observations have also been popular qualitative methods (Egenfeldt-Nielsen 2003, Klastrup 2003), and relevant for the research connected to this paper is the specific combination of conversation and observation carried out in my recent Ph.D. research on players' interpretation and experience with game audio in a gameplay context (Jørgensen 2007a). In this work, individual computer game players played a given scenario from a specific game under my observation, while their gameplay was recorded by use of video capture software. After playing the selected scenario uninterrupted, the informant and the researcher watched the recording together while the informant commented on his own playing and discussed it with the researcher. This conversation was recorded digitally, and transcribed later on. This method first allowed the player informant to play the game uninterrupted in the same way as he would do under normal circumstances; then it allowed the informant to explain his own interpretations, actions and reactions in context, although in retrospect (Jørgensen 2007a, 95). This second point is in particular important for this paper that seeks to outline a method for studying the player's comprehension of transdiegetic features in games.

Even though using this method in relation to the research discussed in this paper has certain problematic aspects, especially related to the abstract and highly theoretical concept and the players' interpretations of their experiences of this concept, it also has important strengths. First of all, the method will not only allow the players to verbalize their interpretation of transdiegetic features; the conversation may also reveal how players understand the relationship between usability features and elements that are part of the fiction and whether they see it as disturbing or integrated in the game context. In addition, the recording of actual gameplay will allow the researcher to study how features connected to the game's interface are utilized and manipulated by the player. Also, and most importantly, my Ph.D. research suggested that players indeed have reflections about the relationship between the functional and fictional aspects of computer games. Although transdiegetic communication was not discussed specifically, informant expressions suggested that at least some players have concepts about what we have defined as transdiegetic communication. One of the informants in the Ph.D. research pointed out that music that appeared to be extradiegetic had a specific relationship to his actions (Jørgensen 2007a, 143). A different informant put focus on the relationship between the fictional space and system messages when reflecting on whether or not there was a

fictional character warning the player about attacks in *Warcraft III* (Jørgensen 2007a, 162). These informant reflections suggest that transdiegetic features and the borders of games and fiction are not unfamiliar ideas for players. It is, however, important for the researcher to be careful in how to pursue these ideas, and the exact method needs to be specifically tailored in order to avoid that the informants unintentionally confirm the hypotheses.

As a study of how a computer game feature is experienced, it should come as no surprise that the method above has several similarities to methods within usability testing. *Usability* is a concept that measures the user's experience with a product in terms of how effective and easy the product can be used. *Usability testing* can be described as "the process of learning from users about a product's usability by observing them using the product" (Barnum 2002, 9), and is a term commonly used about all kinds of techniques used to evaluate a system, regardless of whether they are carried out in a lab or not, or whether the test subjects are experts or novice users. In usability field studies, where testers visit users where they normally use the product or software, common methods are *cued recall* in which users are videotaped and the tape is discussed afterwards, and *think aloud* in which users comment on their own performance (Barnum 2002, 94-5).

Including actual users in usability testing is important for several reasons, many of which are transferable to the study of player experiences of game features. In addition to observing user problems and their methods of use, testers have the opportunity to understand the *mental models* of the users. The conceptual design of computer interfaces tends to be based on metaphors that help users form mental models about how the system is operating (Barnum 2002, 86-89). Intuitiveness and meaningful integration are important in order for the player to form mental models of the relationship between the metaphor and the underlying system, and this is especially relevant in connection with transdiegetic communication and understanding the magic circle of computer games (Salen & Zimmermann 2005, 61-62). Both of these principles are abstract and highly conceptual ideas that are illustrated by the use of metaphors in games. In relation to transdiegetic communication, metaphors are used to integrate the user interface and game mechanics into the fictional game world, for instance through the use of auditory feedback signals that seem to be produced by the avatar's voice, as illustrated in the earlier example from *Warcraft III*. When the user interface and the inclusion of a fictional world are used to make the magic circle concrete and visual, these are also examples of metaphor use. The interface illustrates the border that allows the player to step into the magic circle and take actions that are meaningful in the game context, and the fictional world is the manifestation of the reality inside the magic circle. Since usability testing methods are specifically developed to deal with users' comprehension of interfaces and their relationship to underlying systems, they have certain

advantages when trying to understand players' interpretation of transdiegetic communication and the magic circle.

Below I will describe a methodology that is closely related to usability testing, and that is specifically developed with the player's comprehension and interpretation of the magic circle and transdiegetic communication in mind. I will also discuss the different obstacles and advantages of the methodological choices, and whether or not triangulation of methods would be a fruitful approach to this research.

METHODS FOR QUALITATIVE RESEARCH

Since the planned research focuses on player interpretations of specific computer game features, the method described above of combining observations and conversations is relevant. Since the study also concerns the users' experiences with computer systems, methods from usability testing are also important. It is, however, important to tailor the method to the specific research object in question. This means that the methods cannot be directly transferred from the cases they were developed for to transdiegetic features without being critically evaluated and adjusted for matching the new purpose. In connection with research on players' experiences of transdiegetic communication, it will be fruitful to present the player informant with specific situations where features that question the border between the game and the real world appear. This allows the researcher to have specific contextualized examples as a point of departure, and invites the informant to talk about specific occurrences of the phenomenon and to avoid discussing abstract concepts. In the following, we take as the point of departure an approach similar to usability testing in which the research is based on a context where the player informant is interacting with the game software. All interaction is also somehow documented.

In my Ph.D. research, observations and conversations were the central methods of research, and these took place in a setting that usability testing would call *testing without a lab* (Barnum 2002, 18-19). Traditional usability testing typically takes place in laboratories with permanently installed equipment, often separated into an evaluation room and an observation room. In testing without a lab, the required equipment is temporarily installed in a room set up for testing. While usability testing often includes observers that overlook the testing situation, my previous research only included the player participant and the researcher. Although additional observers would have the potential to pick up more details in the research, in the previous and planned research this would require that the observers had the same level of expertise in the specific research topic as the researcher. More importantly, since observers and the researcher would discuss and evaluate the testing in a following debriefing meeting, the question arises whether the research would be about *how players understand* transdiegetic communication, or the *researchers' interpretation of how players understand* it. Discussing the

observations with the informant instead allows the researcher to filter his/her interpretations of what is going on in the gaming situation through the informant, thereby getting a greater understanding of how players interpret the magic circle and fictionality in computer games, and whether or not transdiegetic communication is a meaningful concept for players. Other advantages of the *testing without a lab* approach are connected to control issues. Contrary to research carried out in the field, i.e. in the natural context of the phenomenon, testing in a controlled environment allows the researcher or tester to prevent interruptions, and it is possible to do the studies on standardized equipment. In the field, user equipment may vary very much in terms of performance, and this has the negative potential of making the different cases incomparable and also of preventing the research to be carried out in some cases. In my research, documenting the play was done by recording the session via video capture software running parallel with the game software on the same computer. Some computers were not able to run the game software smoothly while running the video capture software, thereby forcing the researcher to ad hoc solutions.

However, as with other qualitative research, usability testing may also take place in the field (Barnum 2002, 20-21). The advantages of meeting users in the field are connected to the fact that they are situated in the natural context of where they normally use the system. In connection with researching computer game player experiences, visiting the players at their homes allows them to play the game on their own computer – including their own hardware and software configurations. Playing with a different mouse and keyboard and on a different screen than one is used to may affect not only player performance, but also their experience of the game. Also, many games allow the player to configure shortcuts or add support software. In a dedicated testing environment, these would not be present or would have had to be configured individually for each informant. Of course, having the player informants play console games lessen these needs. Although the software configurations would have had to be set for each informant, hardware would not be a problem since consoles operate on proprietary standards where the hardware and input devices are the same for each user. However, as proprietary technology, running video capture software would be difficult, and the researcher would have had to configure an external device such as a VHS or HD recorder for the documentation.

The issues connected to recording the informant's play may be solved by taking a different approach to the documentation process. One possibility is to skip video-capturing, and instead interview the player while s/he is playing and record the conversation. This would, however, create several interruptions in his/her flow of play, thereby making the interview focus on the players' understanding of the features out of context instead of related to an actual gameplay situation. This may not be a problem in relation to experienced players, which are already familiar with the game mechanics and different strategies, but it may be problematic for novice players that have little or no experience with

the game in question and/or computer games in general. There is also another option that removes the need for video-capturing the actual play session. Instead of recording the informant's play, effective note taking while observing the player informant may be done, followed by a recorded interview. The backside is, of course, that it may be more difficult to contextualize the questions and the concepts, and that it may be harder for the player informant to explain different events. With an audiovisual recording, on the other hand, it is always possible to jump back and forth and allow the player to explain his experiences of specific events in the recording and to have a greater control and freedom over his recitation of his experiences.

METHODOLOGICAL MODELS

Based on the discussion above, I will now present different specific methodological scenarios for how we can study the players' experiences and interpretations with transdiegetic communication and the magic circle. These may or may not be used together, depending on the player informants' personal preferences and previous experience with games. Common for all models is the use of audio recording equipment that documents and allows for transcription of the conversations.

The video commentary model

This model follows the observation/recording and discussion model from Jørgensen's dissertation (2007a). The informant will play a specific computer game while the session is video captured. At the same time, the informant will be observed by the researcher who takes notes that will form the basis for the following conversation. After playing, the informant and the researcher will have a semi-structured conversation about the recording with respect to the research question and the observations done during the play session.

This model is based on the idea that the easiest and most intuitive way for player informants to report on their experiences and interpretations is to make them comment and describe their own recent gameplay. It is believed that it is easier to talk about abstract concepts like transdiegetic communication when they appear in a specific context, and that it is simpler to explain your interpretation of a phenomenon in relation to self-experienced examples. When player informants can relate their interpretations to a specific piece of contextual data, it is easier to describe how they experience the relationship between the game space and the real world, and how transdiegetic features are placed in relation to the two.

Research based on this model is most likely to take place in a controlled research environment ("*testing without a lab*"), but it may also be possible to do the research in the field. In a controlled environment, all equipment may be tested beforehand, and the research situation will be equal for all

informants. The research may carried out in the informant's home when the player has experience with video capture software, and has it installed on his/her own computer.

The standard interview model

This model does not require any video capture equipment, and research may therefore be carried out both in a controlled environment and in the field without any restrictions. The informant plays the game in question uninterrupted, while the researcher observes the session and takes notes. After playing, the researcher will engage the informant in a semi-structured conversation based on the notes. Since this model does not demand any technical equipment besides a computer or gaming device of the informant's choice, the research based on this model may take place in the informants' homes ("*in the field*").

This model is based on the idea that experienced players have a very conscious attitude towards playing, and that they through interaction with the game have become highly familiar with most of its features. This means that when we talk about features they recently interacted with, they will not have any problems describing how they interpret the specific feature. This hypotheses is supported by the findings in my Ph.D. research, where player informants had no problems talking about issues such as system information integrated in the game world and the audio of games they had played earlier. Even what later was called transdiegetic communication were pointed out and discussed by the players.

The support model

As a support for the other models, this method will be used together with the above in order to ease the collection of data by providing specific examples and illustrations that the player informants may use when describing their interpretations and experiences. The players are shown screenshots and pre-recorded video captures from the game they just played and other games. These represent examples of transdiegetic communication, the magic circle and other features that question a strict distinction between the game and the real world, and are used as a basis for getting deeper into a discussion where the player informants are encouraged to reflect on the purpose and function of these features. The idea behind introducing specific samples like these is that it is more intuitive and specific to talk about abstract and theoretical concepts when relating them to specific visual and audiovisual elements that can be studied closely. The problem, however, is that the prepared material may influence the informants' interpretation of transdiegetic elements. A possible solution is to provide samples like this to novice player informants, but not to the experienced. This would guide those unfamiliar with game interfaces towards understanding what kind of information the researcher is after, while directing the experienced players' interpretation towards confirming the hypotheses would be avoided.

CONCLUSIONS

The paper discusses and presents different methods for doing qualitative research related player experiences and interpretations of specific conceptual features on the border between game mechanics and the fictional world. Based on a longer theoretical and methodological discussion, the paper presents two alternative models that are developed with special attention to the questions of investigation in the specific research project. These models are, however, also relevant for other research that focuses on player experiences or comprehensions of specific game elements in computer games. The paper suggests a combination of different methodologies, also known as methodological triangulation, as an important strategy because it allows the researcher to take different critical angles when studying the material. This is especially central to research that concerns player experiences, since this is a delicate issue where different individual may have different interpretations of specific events and features.

Methodological triangulation is in particular beneficial for research on transdiegetic communication and the fuzzy boundaries of the game world. Subjecting informants to both observations and conversations has the benefit of allowing the researcher to study players' gameplay activities in context, while also opening for players' own descriptions and interpretations. Further, presenting the player informants with different sources of data in the test situation, such as images, descriptions of situations, recordings of play, and personal player experiences, the researcher is able to illustrate a theoretical concept without explaining it in words, at the same time as the informant will have plenty of samples that help him explain his comprehension of the relationship between the fictional game world, interface features, and the real world. Since some of the data is generated by the informant's own playing, which is guided by his own strategies and comprehension of the game, each individual informant has the opportunity to add related insights to the project. In this sense, the use of different approaches opens for new findings that the researcher did not foresee before starting the empirical studies. There is a pitfall, however, that the researcher needs to be aware of and that s/he should try to keep under control. The research design needs to be well balanced so that what is under scrutiny becomes clear to the informant, at the same time as the focus on the research hypotheses do not become too strong. A heavy emphasis on the theoretical concept transdiegetic communication may push the informants towards taking on a confirmative stance towards the research project. A way to evade this problem may be to avoid telling the informant what exactly is the research topic, or to provide vague or imprecise descriptions. Instead the questions asked during the interview should be clearly focused without directing the informants towards a confirmative or rejective stance, or they may be centred on features that relate to transdiegetic communication and borderline cases. Examples of such topics for discussion are the graphical user interface, auditory features, and the player's avatar.

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